

WIDE FREQUENCY OFFSET CORRECTION USING ENCODED INTERBURST PHASE DIFFERENCES

ABSTRACT OF DISCLOSURE

Systems and methods for wide frequency offset synchronization are provided. A synchronization data sequence is encoded onto a series of OFDM frequency domain bursts as interburst phase differences between training symbols included within the successive bursts. The interburst phase differences may also encode system configuration information. This technique may be used in conjunction with other synchronization techniques to greatly extend the frequency acquisition range achievable with low cost analog components.